IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re the Application of

Inventor	**:**	**Robert Mesaros**
Application No.	**:**	**10/597,538**
Filed	**:**	**July 28, 2006**
For	**:**	**DIAGNOSTIC ULTRASOUND SYSTEM WITH GRIPPABLE ARTICULATING FLAT PANEL DISPLAY**

APPEAL BRIEF

On Appeal from Group Art Unit 3768
Examiner Hien Ngoc Nguyen

W. Brinton Yorks, Jr.

US PHILIPS CORPORATION
22100 Bothell Everett Highway
Bothell, WA 98021
Phone: (425) 487-7152
Fax: (425) 487-8135
email: brint.yorks@philips.com

Attorney for Appellants

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., Eindhoven, The Netherlands by virtue of an assignment recorded July 28, 2006 at reel 018018, frame 0690.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

This application was originally filed with Claims 1-20. During prosecution Claims 2, 9, and 16-17 were canceled. Claims 1, 3-6, 8, 10-15 and 18-20 have been twice rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments were filed after the Office Action mailed February 1, 2010, which is the subject of this appeal. A notice of appeal was timely filed on April 28, 2010.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

In order to perform ultrasonic imaging of a patient, there must be a continuous acoustic path between the ultrasound probe and the body of the patient. Since ultrasound waves do not travel through air, a gel is used to provide the necessary acoustic coupling between the probe and the body. The first action of the sonographer is to squirt a large bead of gel on the transducer end of the probe. When the probe is placed against the body, the gel couples the ultrasound waves into the region being imaged.

A consequence of this use of gel is that the sonographer's hands become spotted with the slippery gel, which can impede ease of operation of the ultrasound imaging system. One action that often occurs during the exam is adjustment of the ultrasound system's display so that the images can be seen easily by the sonographer. Sometimes the sonographer will adjust the display so that the patient can see the images, then the display is adjusted back for visualizing by the sonographer. In the past, when the ultrasound system display was a CRT monitor, it could be difficult to adjust the monitor with slippery fingers. A solution to this problem was to mount a handle on the front of the monitor as shown in Fig. 1 of the present application. The sonographer can readily adjust the position of the monitor by grasping the handle, even with slippery hands.

With the advent of flat panel displays replacing CRT monitors in recent years, adjustment difficulty was eased by the use of the lighter flat panel displays. But the need to provide for display position adjustment with slippery hands remains. The present invention addresses this problem by eliminating the handle on the front of the display and providing a peripheral gripping surface on the front of the display and forward of the viewing screen. The sonographer can adjust the position of the display by grasping this peripheral gripping surface and an opposing gripping surface on the back of the display with the thumb and fingers to securely grasp the display for adjustment. A secure grip is further provided by locally contouring one of the peripheral gripping surfaces, preferably that on the front of the display. The forward offset of the front gripping surface reduces contact of slippery fingers with the viewing screen. The need for a handle on the front of the display is eliminated.

Independent Claims 1 and 18 are supported by the drawings and specification as seen by reference numerals (#) of the drawings and the specification text (pg., ln) as follows:

1. An ultrasonic diagnostic imaging system including a main body {#12] housing imaging electronics and a control panel {#18} coupled to the imaging electronics comprising:

an articulating display mount {#50; pg. 3, ln 33 to pg. 4, ln 1}; and

a flat panel display {#40; pg. 3, ln 26-33} having a viewing screen {#42} and electrically coupled to the imaging electronics and coupled to the display mount, the flat panel display including a peripheral region {#44, #46} which can be gripped by a user to reposition the flat panel display, the peripheral region including a first gripping surface {#44; pg. 7, ln 32-34} on the front of the flat panel display forward of the plane of the viewing screen and a second gripping surface {#46; pg. 8, ln 9-18} rearward of the plane of the viewing screen,

wherein the first gripping surface is adapted to be engaged by the thumb when repositioning the flat panel display {pg. 7, ln 28-32} and the second gripping surface is adapted to be engaged by one or more fingers when repositioning the flat panel display {pg. 8, ln 9-11}, and

wherein at least one of the gripping surfaces is locally contoured in the peripheral region {pg. 8, ln 4-9} to be engaged by a user.

18. A method for repositioning a flat panel display screen of an ultrasonic diagnostic imaging system comprising:

grasping gripping surfaces on the front and back of the flat panel display on the periphery of the display screen, the front gripping surface being adapted to be engaged by the thumb of a user and the back gripping surface being adapted to be engaged by the fingers of a user {pg. 7, ln 28-

32; pg. 8, ln 9-11}, at least one of the gripping surfaces being locally contoured for engagement by the user {pg. 8, ln 4-9}; and

repositioning the flat panel display screen to a desired viewing position with one hand {pg. 2, ln 17-21}.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether Claims 1, 3-4, 8, 11-12 and 14-15 are anticipated by US Pat. 5,924,988 (Burris et al.)

B. Whether Claims 5-6, 10, 13, and 18-20 were correctly rejected under 35 U.S.C. §103(a) as being unpatentable over Burris et al.

VII. ARGUMENT

A. Whether Claims 1, 3-4, 8, 11-12 and 14-15 are anticipated by US Pat. 5,924,988 (Burris et al.)

Claim 1 describes an ultrasonic diagnostic imaging system including a main body housing imaging electronics and a control panel coupled to the imaging electronics comprising an articulating display mount; and a flat panel display having a viewing screen and electrically coupled to the imaging electronics and coupled to the display mount, the flat panel display including a peripheral region which can be gripped by a user to reposition the flat panel display, the peripheral region including a first gripping surface on the front of the flat panel display forward of the plane of the viewing screen and a second gripping surface rearward of the plane of the viewing screen, wherein the first gripping surface is adapted to be engaged by the thumb when repositioning the flat panel display and the second gripping surface is adapted to be engaged by one or more fingers when repositioning the flat panel display, and wherein at least one

of the gripping surfaces is locally contoured in the peripheral region to be engaged by a user.

Burris et al. describe an ultrasound system with a flat panel display mounted on an ultrasound system by various articulating mechanisms which allow the display screen to be repositioned. Burris et al. do not describe their display screen as having gripping surfaces to manipulate the display, nor do they suggest gripping the display to maneuver it. Instead, Burris et al. teach away from the present invention by telling the user to manipulate the articulating mechanism on which the display is mounted. For example, in col. 5, lines 63-64 they say:

> "By swiveling the two arms 440, 450, an operator can position the flat panel display device 430…."

Similarly, in col. 6, lines 22-23 they say:

> "By articulating this hinge 620, the operator can tilt and swivel the display device 630."

And again in col. 6, lines 26-28 they say:

> "With these arms 740, 750, the operator can horizontally position the display device 730 outside the perimeter of the cart 710."

Similar descriptions are given at col. 6, lines 35-37; at col. 6, lines 46-48; at col. 6, lines 56-61; and at col. 6, line 63. Nowhere is a gripping surface shown or suggested by Burris et al. To the contrary, Burris et al. instruct the reader to adjust the articulating mechanism used to mount the display. Accordingly it is respectfully submitted that Burris et al. cannot anticipate Claim 1 or its dependent Claims 3-8 and 10-15.

Amended Claim 1 further calls for at least one of the front and back gripping surfaces to be locally contoured in the peripheral region for engagement by a user, which enhances the ability to grip the peripheral gripping surface. The Examiner refers to Fig. 4 of Burris et al., which appears to show the entire display to be slightly curved from top to

bottom across the entire display. This curvature is not mentioned by Burris et al. and there is no way to discern its purpose, or whether it is just the way the draftsman executed the drawing. In any event, it is seen that this curvature extends across the entire flat panel display and not locally constrained to the peripheral region of the display. It is respectfully submitted that amended Claim 1 is not anticipated by Burris et al. for this further reason.

Since Claims 3-4, 8, 11-12 and 14-15 all ultimately depend from Claim 1, it is respectfully submitted that these claims cannot be anticipated by Burris et al. by reason of their dependency. Moreover, Claim 11 calls for the contoured gripping surface to be textured, Claim 12 calls for the texturing to include indentations, and Claim 14 calls for the texturing to include projections, none of which are found in Burris et al. It is respectfully submitted that these claims are not anticipated by Burris et al. for these additional reasons.

B. Whether Claims 5-6, 10, 13, and 18-20 were correctly rejected under 35 U.S.C. §103(a) as being unpatentable over Burris et al.

Claims 5-6, 10 and 13 were rejection under 35 U.S.C. §103(a) as being unpatentable over Burris et al. Although these claims recite numerous elements and features not found in Burris et al. such as the first gripping surface being an elastomeric material, a hard polymeric material coated with an elastomeric material, a pliable material, and indentations comprising perforations for ventilation, the Examiner has rejected the claims by making the following unsupported statements:

> "elastomeric material such as rubber and plastic are commonly use material to produce flat panel display casing"

> "elastomeric material provides insulation for the electronics inside the flat panel displays" and
>
> "indentations c ompris[ing] pe rforations through a n enclosure f or ventilating the flat panel display [are] an essential design feature"

These assertions are made without any supporting evidence whatsoever. Certainly materials and gripping perforations used for ventilating are nowhere found in Burris et al. It is respectfully submitted that the lack of evidence supporting the assertions used to rejection Claims 5-6, 10 and 13 mandate that these claims be allowed over the prior art of record in this case.

Claim 18 describes a method for repositioning a flat panel display screen of an ultrasonic diagnostic imaging system comprising grasping gripping surfaces on the front and back of the flat panel display on the periphery of the display screen, the front gripping surface being adapted to be engaged by the thumb of a user and the back gripping surface being adapted to be engaged by the fingers of a user, at least one of the gripping surfaces being locally contoured for engagement by the user; and repositioning the flat panel display screen to a desired viewing position with one hand. Burris et al. does not show or suggest a peripheral gripping surface on the front and back of their flat panel displays, nor a gripping surface which is locally contoured for engagement by a user. As previously mentioned, all of the instructions of Burris et al. for adjusting the position of their flat panel display are instructions to adjust the articulating mounting mechanism for the display, and the curvature of the display in Fig. 4 of Burris et al. is not local but extends across the entire display. Burris et al. is seen to teach away from the present invention. There is no way to determine whether the flat panel displays of Burris et al. can be adjusted with one hand or require two hands, as Burris et al.

never suggest using any hands on the display to adjust position. Furthermore, Burris et al. does not show or suggest grasping gripping surfaces on the top or the sides of their flat panel display to adjust vertical or horizontal positioning as described in dependent Claims 19 and 20. Only the present application describes the features of Claims 18-20 which are said in the rejection to be found in Burris et al. It is respectfully submitted that Claims 18-20 are patentable over Burris et al. for all of these reasons.

VIII. CONCLUSION

Based on the law and the facts, it is respectfully submitted that Claims 1, 3-4, 8, 11-12 and 14-15 are not anticipated by Burris et al. and that Claims 5-6, 10, 13, and 18-20 are patentable over Burris et al. Accordingly, it is respectfully requested that this Honorable Board reverse the grounds of rejection of Claims 1, 3-6, 8, 10-15 and 18-20 of this application which were stated in the February 1, 2010 Office action being appealed.

Respectfully submitted,

ROBERT MESAROS

By: /W. Brinton Yorks, Jr./
W. Brinton Yorks, Jr.
Reg. No. 28,923

June 21, 2010

APPENDIX A: CLAIMS APPENDIX

The following Claims 1, 3-6, 8 , 10-15 and 18-20 are the claims involved in this appeal.

1. (previously presented) An ultrasonic diagnostic imaging system including a main body housing imaging electronics and a control panel coupled to the imaging electronics comprising:

an articulating display mount; and

a flat panel display having a viewing screen and electrically coupled to the imaging electronics and coupled to the display mount, the flat panel display including a peripheral region which can be gripped by a user to reposition the flat panel display, the peripheral region including a first gripping surface on the front of the flat panel display forward of the plane of the viewing screen and a second gripping surface rearward of the plane of the viewing screen,

wherein the first gripping surface is adapted to be engaged by the thumb when repositioning the flat panel display and the second gripping surface is adapted to be engaged by one or more fingers when repositioning the flat panel display, and

wherein at least one of the gripping surfaces is locally contoured in the peripheral region to be engaged by a user.

2. (canceled)

3. (original) The ultrasonic diagnostic imaging system of claim 1, wherein the first gripping surface faces to the front of the flat panel display and the second gripping surface faces to the rear of the flat panel display.

4. (original) The ultrasonic diagnostic imaging system of claim 1, wherein flat panel display further includes a bezel extending about the periphery of the display, wherein the first gripping surface is located on the bezel and the second gripping surface is located behind the bezel.

5. (previously presented) The ultrasonic diagnostic imaging system of claim 1, wherein the first gripping surface is formed of an elastomeric material.

6. (previously presented) The ultrasonic diagnostic imaging system of claim 1, wherein the first gripping surface is formed of a hard polymer material which is coated with an elastomeric material.

7. (previously presented; not appealed) The ultrasonic diagnostic imaging system of claim 6, wherein the elastomeric material comprises an elastomeric coating.

8. (original) The ultrasonic diagnostic imaging system of claim 6, wherein the hard polymer material further comprises a bezel extending around the periphery of the flat panel display.

9. (canceled)

10. (previously presented) The ultrasonic diagnostic imaging system of claim 1, wherein at least one of the gripping surfaces is formed of a pliable material so as to be grippable by a user.

11. (previously presented) The ultrasonic diagnostic imaging system of claim 1, wherein the contouring comprises a surface which is textured so as to be grippable by a user.

12. (original) The ultrasonic diagnostic imaging system of claim 11, wherein the gripping surface which is textured includes indentations in its surface.

13. (original) The ultrasonic diagnostic imaging system of claim 12, wherein the indentations comprise perforations through an enclosure which further comprise means for ventilating the flat panel display.

14. (original) The ultrasonic diagnostic imaging system of claim 11, wherein the gripping surface which is textured includes projections from its surface.

15. (original) The ultrasonic diagnostic imaging system of claim 1, wherein the peripheral extends around all four sides of the flat panel display.

16. - 17. (canceled)

18. (previously presented) A method for repositioning a flat panel display screen of an ultrasonic diagnostic imaging system comprising:

grasping gripping surfaces on the front and back of the flat panel display on the periphery of the display screen, the front gripping surface being adapted to be engaged by the thumb of a user and the back gripping surface being adapted to be engaged by the fingers of a user, at least one of the gripping surfaces being locally contoured for engagement by the user; and

repositioning the flat panel display screen to a desired viewing position with one hand.

19. (original) The method of claim 18, wherein grasping further comprises grasping gripping surfaces located on the top periphery or the bottom periphery of the display screen;

wherein repositioning further comprises adjusting the vertical position of the flat panel display.

20. (original) The method of claim 18, wherein grasping further comprises grasping gripping surfaces located on the left periphery or the right periphery of the display screen;

wherein repositioning further comprises adjusting the horizontal position of the flat panel display.

APPENDIX B: EVIDENCE APPENDIX

None. No extrinsic evidence has been submitted in this case.

APPENDIX C: RELATED PROCEEDINGS APPENDIX

None. There are no related proceedings.